Title:

METHOD, SYSTEM AND PROGRAM FOR DETERMINING A MODIFICATION OF ... Mark A. Carlson and Rowan E. da Silva

Inventor:

Filing Date: January 16, 2002

Serial No: 10/051,991

Docket No: P5764-US-NP-0

REPLACEMENT SHEET

1/18

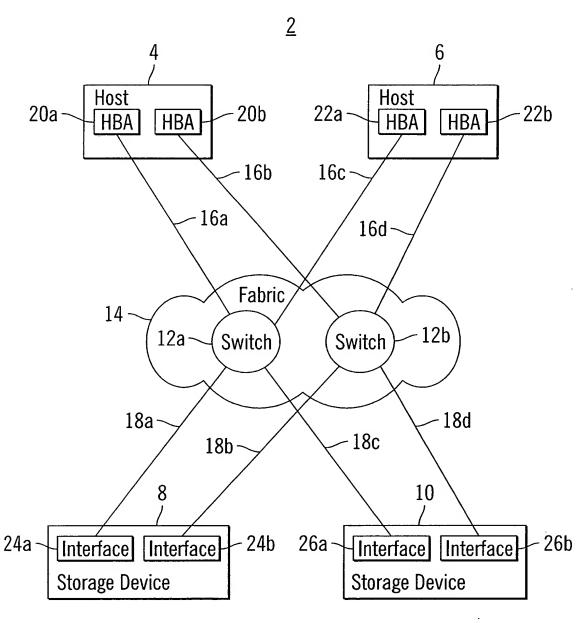


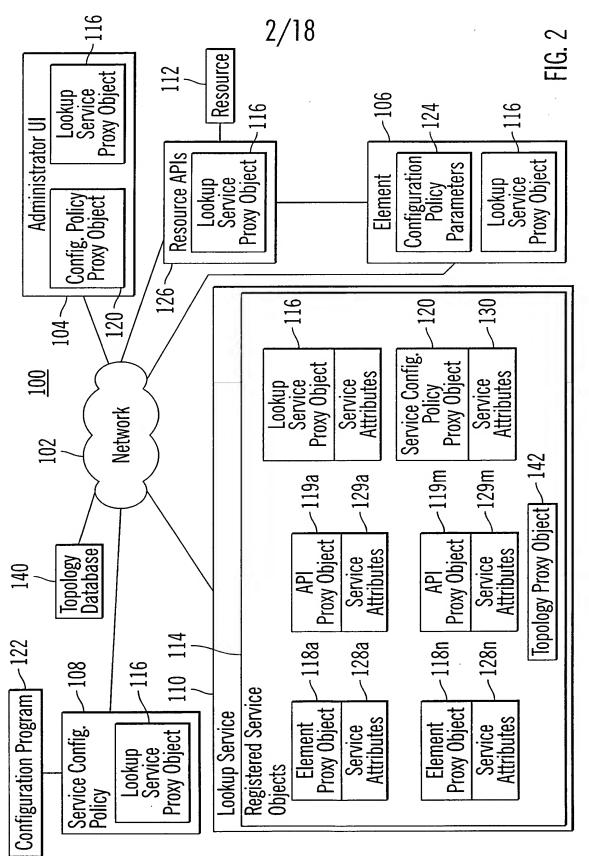
FIG. 1

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Serial No: 10/051,991 Docket No: P5764-US-NP-0

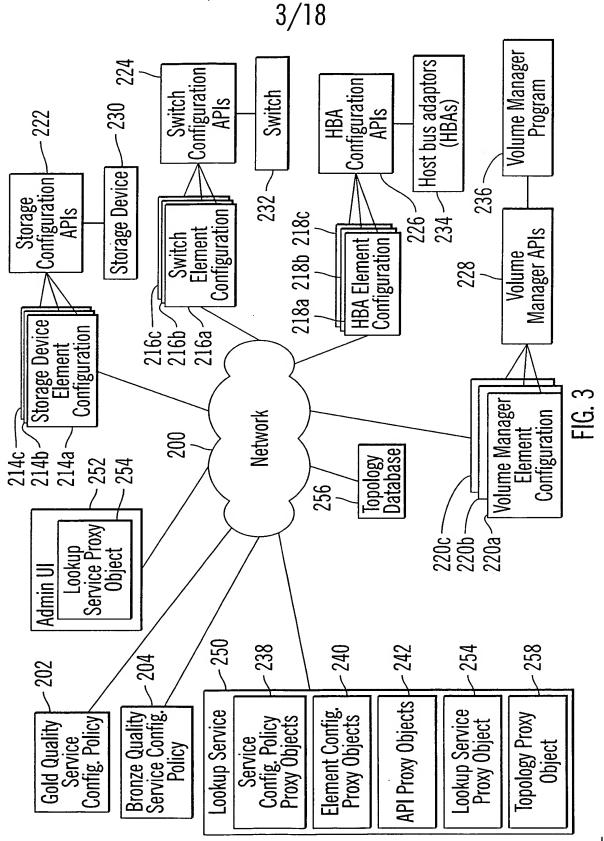


Ilnventor: Mark A. Carlson and Rowan E. da Silva

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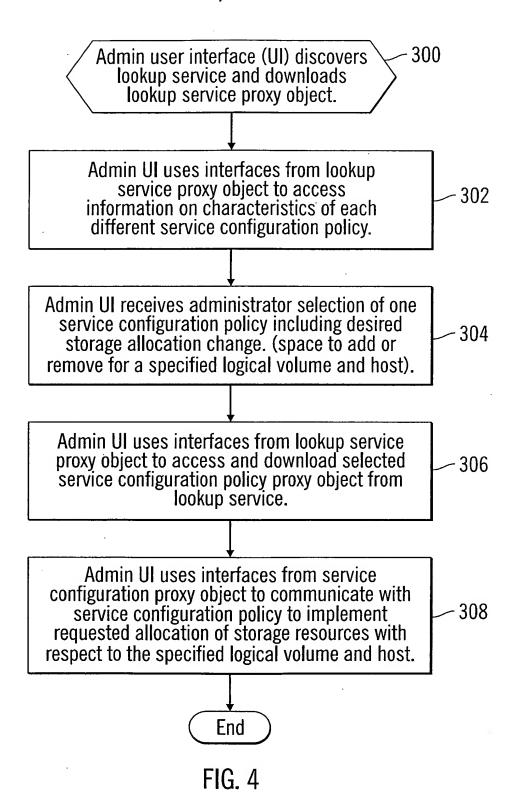
Title:

METHOD, SYSTEM AND PROGRAM FOR DETERMINING A MODIFICATION OF ...

Ilnventor: Mark A. Carlson and Rowan E. da Silva

Filing Date: January 16, 2002 Serial No: 10/051,991 Docket No: P5764-US-NP-0 REPLACEMENT SHEET

Customer No. 045774



4

Docket No: P5764-US-NP-0 Customer No. 045774 5/18 -350SERVICE CONFIGURATION POLICY RECEIVES 360 REQUEST FROM ADMIN FOR NEW ALLOCATION OF STORAGE RESOURCES WITH RESPECT TO LOGICAL VOLUME AND HOST. STORAGE DEVICE ELEMENT CONFIGURATION
POLICY USES DETERMINED STORAGE
CONFIGURATION API PROXY OBJECTS (AND
APIS THEREIN) TO CONFIGURE THE ASSOCIATED 352 STORAGE DÉVICE(S) TO ALLOCATE STORAGE SERVICE CONFIGURATION POLICY USES ASSOCIATED ELEMENT CONFIGURATION PROXY OBJECTS TO CALL ONE ELEMENT CONFIGURATION POLICY FOR EACH RESOURCE TO RECONFIGURE AND TO CARRY OUT THE REQUESTED ALLOCATION SPACE FOR THE REQUESTED ALLOCATION. -364 OF STORAGE RESOURCES FOR HOST AND LOGICAL VOLUME. SWITCH ELEMENT CONFIGURATION POLICY USES DETERMINED SWITCH CONFIGURATION API PROXY OBJECT (AND 354 APIS THEREIN) TO CONFIGURE THE ASSOCIATED SWITCHES TO ALLOCATE CALLED STORAGE DEVICE ELEMENT PATHS FOR THE REQUESTED ALLOCATION. CONFIGURATION POLICY USES INTERFACES IN LOOKUP SERVICE PROXY OBJECT TO QUERY THE 366 SERVICE ATTRIBUTES OF THE STORAGE CONFIGURATION API PROXY OBJECTS TO DETERMINE ONE OR MORE STORAGE CONFIGURATION API PROXY OBJECTS CAPABLE OF HBA ELEMENT CONFIGURATION USES CONFIGURING STORAGE DEVICE(S) HAVING ENOUGH AVAILABLE SPACE TO FULFILL REQUESTED STORAGE ALLOCATION WITH A STORAGE TYPE **DETERMINED HBA CONFIGURATION API** PROXY OBJECTS (AND APIS THEREIN) TO ASSIGN ASSOCIATED HBA(S) TO THE LEVEL THAT SATISFIES THE ELEMENT DETERMINED PATH. CONFIGURATION POLICY PARAMETERS. -368 356 **VOLUME MANAGER ELEMENT CONFIGURATION** CALLED SWITCH ELEMENT CONFIGURATION POLICY USES INTERFACES IN LOOKUP SERVICE PROXY
OBJECT TO QUERY THE SERVICE ATTRIBUTES OF
THE SWITCH CONFIGURATION API PROXY OBJECTS POLICY USES DETERMINED VOLUME MANAGER API PROXY OBJECTS (AND APIS THEREON) TO ASSIGN THE ALLOCATED STORAGE TO DETERMINE ONE OR MORE SWITCH CONFIGURATION API PROXY OBJECTS CAPABLE OF CONFIGURING SWITCH(S) INCLUDING PATHS SPACE TO THE LOGICAL VOLUMES IN THE HOST SPECIFIED IN THE ADMIN REQUEST. BETWEEN THE DETERMINED STORAGE DEVICES 370 AND SPECIFIED HOST IN A MANNER THAT SATISFIES SERVICE CONFIGURATION POLICY PARAMETERS. **RETURN CONFIGURATION** COMPLETE TO ADMIN. 358 CALLED HBA ELEMENT CONFIGURATION USES INTERFACES IN LOOKUP SERVICE PROXY OBJECT TO QUERY SERVICE ATTRIBUTES FOR HBA CONFIGURATION API PROXY OBJECTS TO FIG. 5 360 DETERMINE ONE OR MORE HBA CONFIGURATION API PROXY OBJECTS CAPABLE OF CONFIGURING HOST ADAPTORS THAT CAN CONNECT TO DETERMINED SWITCHES AND PATHS THEREIN.

METHOD, SYSTEM AND PROGRAM FOR DETERMINING A MODIFICATION OF ...

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Title:

Ilnventor:

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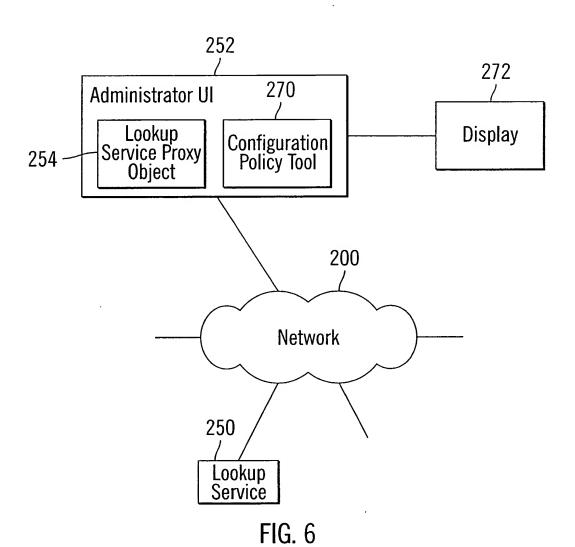
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Ilnventor: Mark A. Carlson and Rowan E. da Silva

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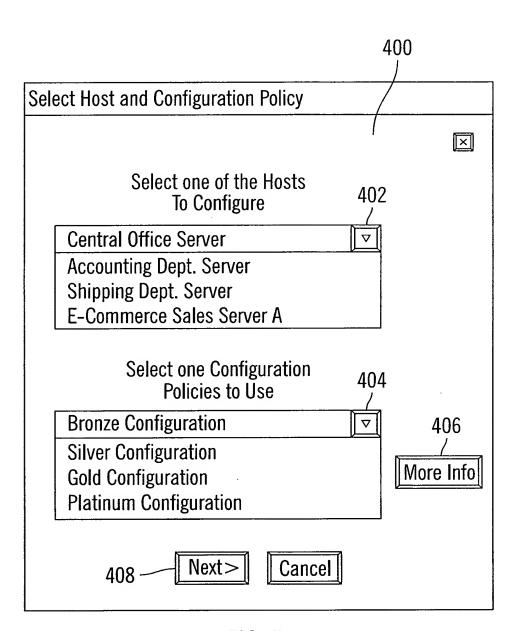


FIG. 7

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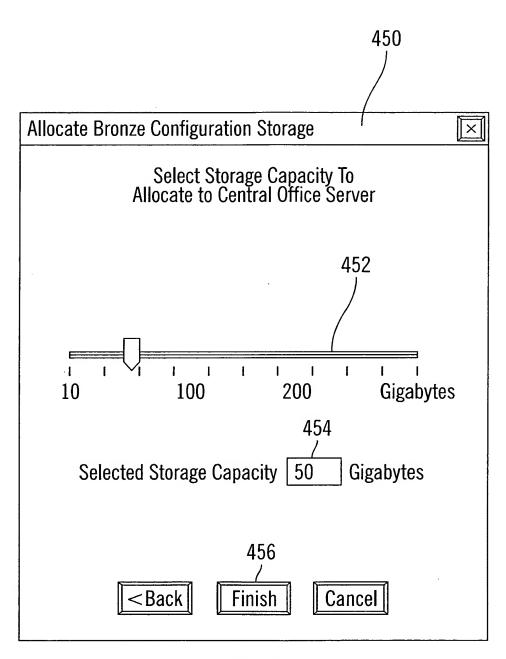


FIG. 8

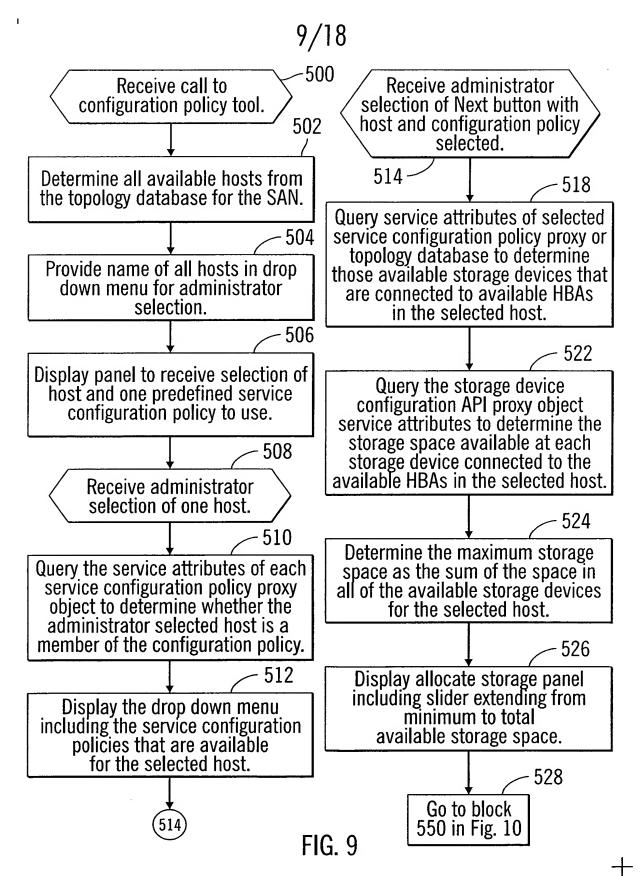
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Serial No: 10/051,991

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Ilnventor: Mark A. Carlson and Rowan E. da Silva

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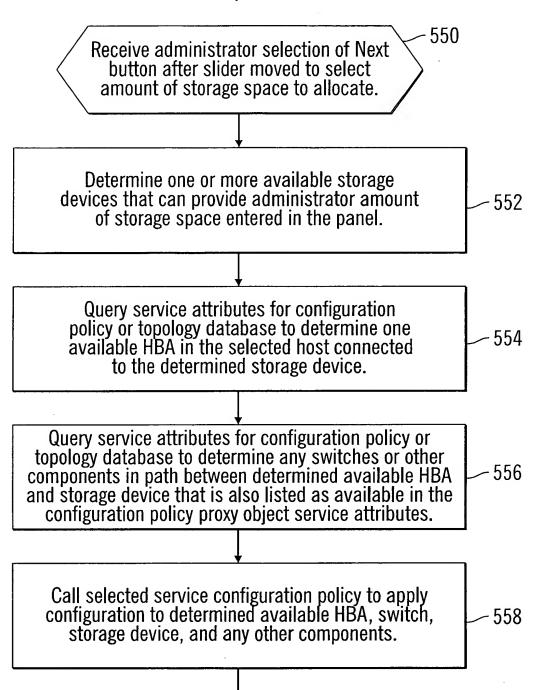


FIG. 10

End

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Service Attr	ibute	S						
Availabilit Redundan	ty/ icy F	Perform	ance	Configurable Resources		Other	Element Configuration Policy ID	
750		7	52	7	54	756	758	
				FIG. 11	_			

270 /			•
Configuration Policy Too	ol		
772 /	774 /	776 /	778 /
Element Configuration Policy	Throughput	Availability	Latency
Switch Element 132	10-100 MB/sec	Standard	High
Switch Element 133	100-200 MB/sec	High	Standard
• • •	• • •	• • • •	• • • •
HBA Element 320	10-100 MB/sec	High	Standard
HBA Element 133	100-200 MB/sec	Continuous	Low

**Element Configuration Attribute Table** 

FIG. 12

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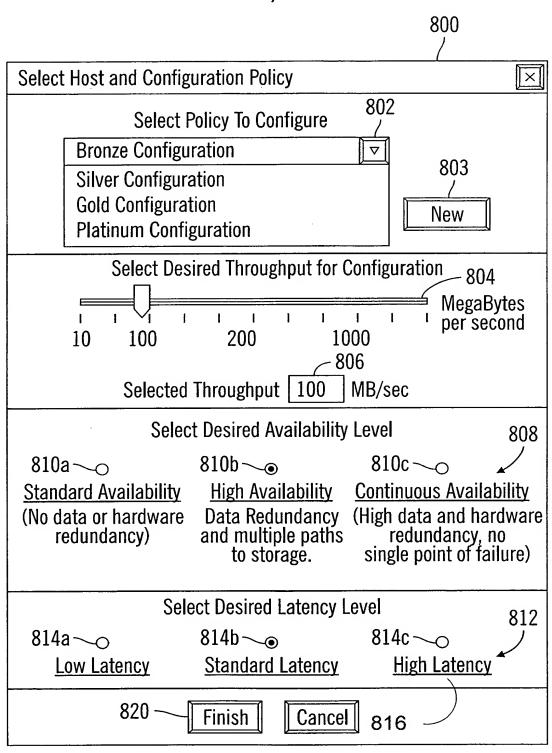


FIG. 13

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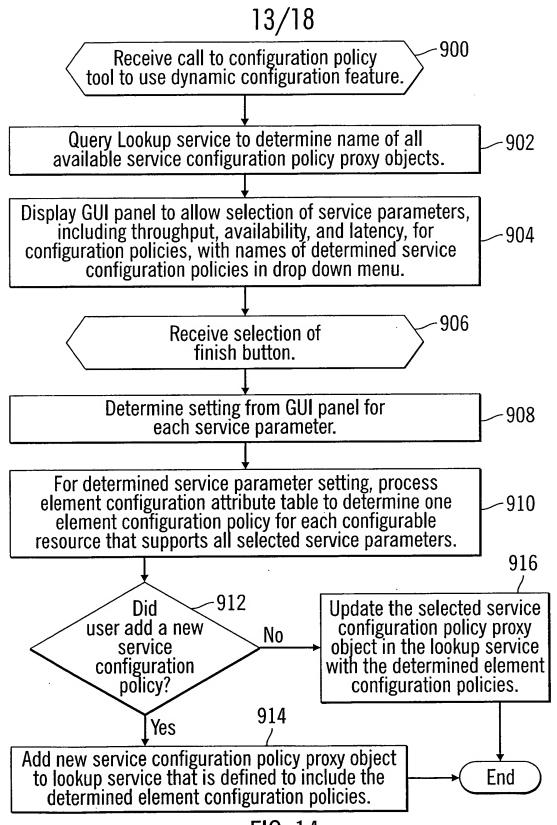


FIG. 14

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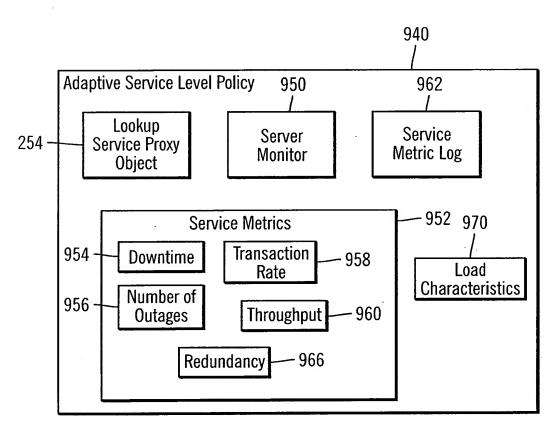


FIG. 15

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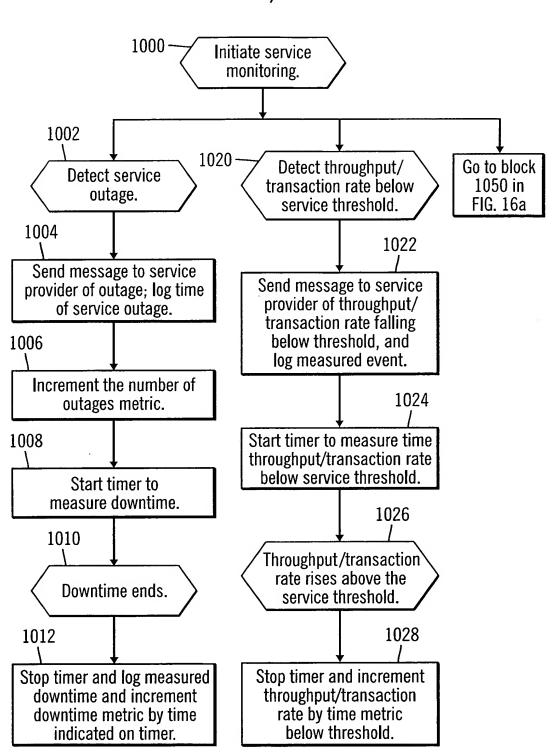


FIG. 16a

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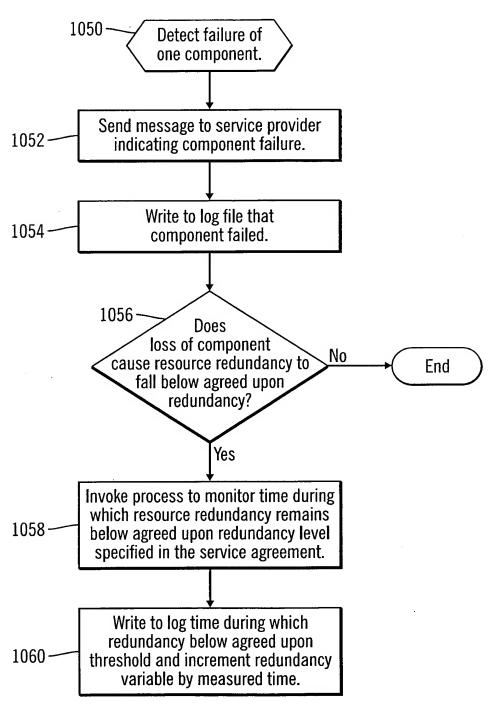


FIG. 16b

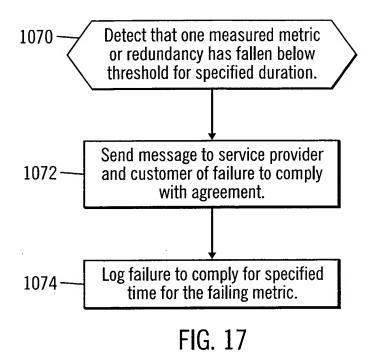
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